

ABSTRACT

A CDMA data transmission system and method for periodically allocating
5 channels to subscriber units, wherein prior to the beginning of any period all active
subscriber units are identified that are in communication with the transmitter and
for which there are data, exceeding a given minimal quantity, stored in a buffer. For
each active subscriber unit one or more priority factors are calculated as a function
of associated power levels; and on the basis of the priority factors, at least one
10 channel is allocated to a corresponding active subscriber unit. The channel
allocation is repeated in respect of any active subscriber units to which no channels
have yet been allocated, subject to an availability of unallocated channels and
subject to a limitation of maximum transmitter power.